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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,095	08/18/2003	Kurt R. Miller	20031	3335

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EXAMINER	
FUNK, STEPHEN R	
ART UNIT	PAPER NUMBER
2854	

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/643,095	MILLER, KURT R.
	Examiner	Art Unit
	Stephen R Funk	2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 18 August 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/18/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The disclosure is objected to because of the following informalities: On page 9 line 12 a period should be inserted after "substrate". Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 7, 11, 12, 14, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Maier et al. (US 5,258,925).

With respect to claim 1, Maier et al. teach dampening at a printing across the width of the plate (column 10 lines 9 - 22, Figure 4, the plate extending laterally across the web is inherent), printing ink on the substrate (Figure 4), measuring multiple density tones of the ink printed on the substrate (column 2 lines 20 - 54, column 5 line 28 - column 6 line 68), calculating a dampener feed error (column 5 lines 28 - 42, column 6 lines 3 - 21), and adjusting the dampener feed rate (column 6 lines 48 - 62).

With respect to claims 3 and 14 note the colorbar (19).

With respect to claims 7 and 17 see column 2 lines 20 - 54.

With respect to claim 11 see column 6 lines 63 - 65.

With respect to claim 12 note the comments above with respect to claim 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 5, 6, 8, 13, 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al. in view of Zorn (US 5,713,286).

With respect to claims 2, 13, and 20, Maier et al. do not teach adjusting the dampener feed at a multiplicity of zones. Zorn teaches adjusting the dampener feed at different zones. See the paragraph bridging columns 3 and 4 and the paragraph bridging columns 6 and 7 of Zorn. It would have been obvious to one of ordinary skill in the art to provide the method and apparatus of Maier et al. with the step of adjusting the dampener feed at a multiplicity of zones in view of Zorn so as to control dampening with respect to individual inking zones.

With respect to claims 5, 6, and 16 Maier et al. do not teach a spray dampening system. Maier et al. teach a spray dampening system. See again the paragraph bridging columns 3 and 4 and the paragraph bridging columns 6 and 7 of Zorn. It would have been obvious to one of ordinary skill in the art to provide the method and apparatus of Maier et al. with a spray dampening system in view of Zorn so as to more accurately adjust the dampener feed of different inking zones. With respect to claim 6 the pulse system of Zorn inherently uses some type of valve to adjust the spray pulses.

With respect to claims 8 and 18 Maier et al. do not measure the density of an entirely hydrophilic area. Zorn teaches measuring for ink density at hydrophilic areas (36, 37). See the entire document of Zorn, in particular, column 6 line 18+. It would have been obvious to one of ordinary skill in the art to provide the method and apparatus of Maier et al. with the step of measuring the ink density of hydrophilic areas in view of Zorn so as to detect ink scumming in the nonprinted areas.

Claims 4, 10, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al. in view of Quadracci (US 5,791,249).

With respect to claims 4 and 15, Maier et al. do not teach measuring the densities within a printed image. Quadracci teaches measuring the density within a colorbar or a printed image. See column 2 lines 53 - 56 of Quadracci. It would have been obvious to one of ordinary skill in the art to provide the method of Maier et al. with the step of measuring the density within a printed image in view of Quadracci so as to forego printing a colorbar and thus utilizing the entire substrate.

With respect to claim 10, Maier et al. do not specifically teach delaying until the result from step E reaches the measuring location, then repeating step A. This would, however, appear to be inherent in order to effectively feedback control the dampener. Quadracci teaches delaying until the result from step E reaches the measuring location. See Figures 1 and 2 and claim 1 ,2 and 5 of Quadracci. It would have been obvious to one of ordinary skill in the art to provide the method of Maier et al. with the step of delaying subsequent changes until the adjusted dampener feed printing result reaches the measuring location in view of Quadracci so as to make only the necessary incremental changes in the printing conditions.

With respect to claim 19 Maier et al. do not specifically teach the CMYK colors. See the paragraph bridging columns 6 and 7 of Maier et al. Quadracci teach the colors as recited. See column 7 line 54 of Quadracci. It would have been obvious to one of ordinary skill in the art to provide the apparatus of Maier et al. with the conventional ink colors disclosed by Quadracci.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al. in view of Kipphan et al. (US 5,050,994).

Maier et al. do not teach calculating the "swim" of the measurements. See paragraph [0005] in applicant's specification. Kipphan et al. teach calculating the excessive dampening. See column 9 line 14+ of Kipphan et al. It would have been obvious to one of ordinary skill in the art to provide the method of Maier et al. with the step of calculating the swim of the density measurements in view of Kipphan et al. so as to correct excessive dampening.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the entire documents of Yamamoto et al. ('512) and Leurer ('769) and the paragraph bridging columns 2 and 3 of Hank et al. ('182).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen R. Funk whose telephone number is (571) 272-2164. The examiner can normally be reached M - F, except Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Hirshfeld, can be reached at (571) 272-2168.

The fax phone number for ALL official papers is (703) 872-9306. Upon consulting with the examiner *unofficial* papers only may be faxed directly to the examiner at (571) 273-2164.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

SRF
March 30, 2004

Stephen Funk
STEPHEN R. FUNK
PRIMARY EXAMINER